

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2004/001497

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K 38/55, A61K 31/726, A61K 31/727, A61P 7/02, A61P 9/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields

IPC 7 A61K 38/55, A61K 31/726, A61K 31/727, A61P 7/02, A61P 9/10

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms)

STN, Delphion, Canadian Patent Database, Medline. Keywords: glycosaminoglycan, serpin, heparin, low molecular weight heparin, dermatan sulfate, heparan sulfate, hyaluronic acid, serine protease inhibitor, antithrombin, ATH, cardiopulmonary bypass, CPB, cerebral embolism, thrombosis, edema.

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant	Relevant to claim No(s).
Y	US 6,562,781 HAMILTON CIVIC HOSPITALS RESEARCH DEVELOPMENT INC. 2003/05/13 whole document.	1-25
Y	US 2003/0124705 A1 BERRY, L.R. et al. 2003/07/03 whole document.	1-25
Y	US 2003/0100487 A1 BERRY, L. 2003/03/29 whole document.	1-25
Y	HEYER, E.J. et al. "Heparin-Bonded Cardiopulmonary Bypass Circuits Reduce Cognitive Dysfunction." Journal of Cardiothoracic and Vascular Anesthesia (2002) Vol.16, No.1, pp.37-42. Whole document:	1-25

[X] Further documents are listed in the continuation of Box C. [X] See patent family annex.

\* Special categories of cited documents :  
 "A" document defining the general state of the art which is not considered to be of particular relevance  
 "E" earlier application or patent but published on or after the international filing date  
 "L" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  
 "O" document referring to an oral disclosure, use, exhibition or other means  
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
 "&" document member of the same patent family

Date of the actual completion of the international search

28 February 2005 (28-02-2005)

Date of mailing of the international search report

04 April 2005 (04-04-2005)

Name and mailing address of the ISA/CA  
*Canadian Intellectual Property Office*  
*Place du Portage I, C114 - 1st Floor, Box PCT*  
*50 Victoria Street*  
*Gatineau, Quebec K1A 0C9*

Authorized officer

André Pilon (819) 997-2996

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2004/001497

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
Y	CHAN, A.K.C. et al. "Antithrombin-Heparin Covalent Complex: A Possible Alternative to Heparin for Arterial Thrombosis Prevention." Circulation (2002) Vol.106, No.2, pp.261-265. Whole document.	1-25

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/CA2004/001497

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
US6562781	13-05-2003	AU7688396 A CA2237159 A1 CA2378225 A1 EP0863768 A2 JP2000501082T T US6491965 B1 US6562781 B1 US2003100487 A1 US2003113314 A1 US2003124705 A1 WO9719701 A2	19-06-1997 05-06-1997 22-09-2002 16-09-1998 02-02-2000 10-12-2002 13-05-2003 29-05-2003 19-06-2003 03-07-2003 05-06-1997
US2003124705	03-07-2003	AU7688396 A CA2237159 A1 CA2378225 A1 EP0863768 A2 JP2000501082T T US6491965 B1 US6562781.B1 US2003100487 A1 US2003113314 A1 US2003124705 A1 WO9719701 A2	19-06-1997 05-06-1997 22-09-2002 16-09-1998 02-02-2000 10-12-2002 13-05-2003 29-05-2003 19-06-2003 03-07-2003 05-06-1997
US2003100487	29-05-2003	AU7688396 A CA2237159 A1 CA2378225 A1 EP0863768 A2 JP2000501082T T US6491965 B1 US6562781 B1 US2003100487 A1 US2003113314 A1 US2003124705 A1 WO9719701 A2	19-06-1997 05-06-1997 22-09-2002 16-09-1998 02-02-2000 10-12-2002 13-05-2003 29-05-2003 19-06-2003 03-07-2003 05-06-1997